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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,691	08/05/2003	Kiyoji Minegishi	59558.00018	7601
32294	7590	09/14/2005	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			BRYANT, DAVID P	
		ART UNIT	PAPER NUMBER	
			3726	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/633,691	MINEGISHI ET AL.
Examiner	Art Unit	
David P. Bryant	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 05 July 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-3 and 6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-3 and 6 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_ .

## DETAILED ACTION

### *Drawings*

Replacement drawing sheets were received on July 5, 2005. These drawings are accepted.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000-179544 (hereinafter JP).**

Claim 1: JP teaches a method for assembling a rotor of a power transmission device **26** having an oscillator **24** (or **25**) and a rotor **23a** (or **24a**) (see Figure 6), the method comprising:

loading a plurality of rolling elements **2** to be arranged between the rotor and the oscillator via a retainer **3** for positioning said rolling elements, from inside said retainer (see Figure 1, noting the flanged portions **3b** of the retainer within which the rolling elements are positioned from the inside); and

assembling said rotor into inside said loaded rolling elements (Figures 1 and 6).

Claim 2: In Figures 1 and 2, note inner support ring **4**, which is diametrically smaller than the PCD connecting the rolling centers of the rolling elements **2** and is inserted within the loaded

rolling elements 2 to capture the rolling elements between the retainer and the inner support ring. The inner support ring is perforated with a plurality of inner pockets 6 for allowing the rolling elements to be partially exposed to its inner side. As depicted in Figure 6, the rotor 23a (or 24a) is inserted into the interior space of the inner support ring.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-179544 (hereinafter JP) in view of Murphy (U.S. Patent No. 4,398,777).**

JP teaches all claimed steps, with the exception of pulling out the inner support ring.

Murphy teaches a method of holding rolling elements 14 against an inner retainer 10 using an inner support ring 20. See Figures 1-3. When mounting the rolling elements and retainer about a shaft, the shaft is inserted within the inner support ring, and the inner support ring is pushed/pulled out from the inner support ring as the shaft is inserted within the rolling elements (Abstract, column 2, lines 11-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have removed the inner support ring of JP as the retainer and rolling elements are installed on the rotor, as taught by Murphy, to permit re-use of the inner support ring. Further, it is noted that applicant discloses (in paragraphs [0059] and [0060] of the specification) that the

inner support ring can either be pulled out from the rolling elements, or left as is on the rotor. Thus, there appears to be no criticality to removing the inner support ring, and to do so is deemed to have been obvious and well within the level of ordinary skill in the art.

**Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-179544 (hereinafter JP).**

Although not explicitly disclosed by JP, the examiner takes Official Notice that a rotor ring is conventionally installed on a rotor subsequent to installation of a bearing element thereon, and to install such a rotor ring against the rolling elements/retainer of JP would have been obvious to one of ordinary skill in the art to restrain the rolling elements and retainer from relative axial movement with the rotor.

#### *Response to Arguments*

Applicant's arguments filed July 5, 2005, have been fully considered but they are not persuasive.

(1) *Applicant states that independent claim 1 recites loading the rolling elements via a retainer from inside the retainer. Applicant then presents the argument that the retainer 3 and support ring 4 of JP '544 do not hold the roller 2 inside thereof, but instead the roller 2 is held such that it is partly outside both members 3 and 4.*

Although applicant correctly states the claim recitation, the comparison of the claim language with JP '544 is inaccurate. The claim language recites nothing whatsoever about the rolling elements being contained entirely within the retainer. All that is required of the claim is that the rolling elements are inserted into the retainer from the inside. As clearly depicted in Figure 1B and disclosed in paragraphs [0013] and [0014] of JP '544, the pockets 5 formed in the retainer 3 are formed with a diameter smaller than the diameter of rolling elements 2 to prevent

the rolling elements from dropping out of the retainer after they are inserted therein. As disclosed in paragraph [0013] in roughly translated English, "These outside direction, annular section 3a of a member 3...forms pockets 5" and "2 is held [these outside direction] over the pockets 5 of...a member 3." Thus, it is evident that the rolling elements are inserted into the pockets 5 between the annular flanges 3a from inside the retainer 3 to prevent the rollers from moving in the outward direction. Further, based on the structure of the retainer 3, it is not reasonably possible to insert the rolling elements into the retainer any way other than from the inside thereof.

*(2) Applicant states that independent claim 1 recites a method for assembling a rotor of a power transmission device with an oscillator, whereas JP '544 relates to a reduction gear, and fails to teach any particular method steps for assembling a rotor and oscillator.*

To the contrary, paragraphs [0011] and [0012] of JP '544 disclose that the rolling member/retainer combination "may be installed between the epicyclic gear...and the crankshaft which supports this epicyclic gear." As related to independent claim 1, the crankshaft is the rotor of the power transmission device, whereas the epicyclic gear is the oscillator. Note Figure 6, which depicts the crankshaft 23, the epicyclic gears 24 and 25, and the rolling element/retainer combinations 31 in their assembled form. See the corresponding disclosure in paragraph [0018] as well.

Applicant's mention of the embodiment depicted in Figure 7 of JP '544 is noted, but has no bearing on the rejection of the claims, since the embodiment depicted in Figure 1 of JP '544 has formed the basis for the rejection.

*(3) Applicant states that dependent claim 2 recites the additional features of "the inner support ring being arranged radially inside a circle connecting the rolling centers of said rolling elements" and the inner support ring being "perforated with a plurality of inner pockets for allowing said rolling elements to be partially exposed to its inner side." Applicant then goes on to note Figures 4 and 7 of JP '544, stating that JP '544 fails to meet these claimed features.*

As depicted in Figure 1B, **PCD** corresponds directly to applicant's claimed "circle connecting the rolling centers of said rolling elements." Clearly, the inner support ring **4** is "arranged radially inside" that circle **PCD**. Further, the inner support ring **4** is perforated with a plurality of inner pockets **6** that allow the rolling elements **2** to be partially exposed to its inner side. This is explicitly shown in Figures 1A and 1B.

*(4) Although applicant notes that Murphy is used in combination with JP '544 in the rejection of claim 3, applicant nonetheless argues that Murphy fails to teach or suggest limitations recited in independent claim 1.*

Applicant has attacked the Murphy reference based on what it does not teach (i.e. the limitations in claim 1 that the examiner contends are anticipated by JP '544), rather than addressing what Murphy has been cited for (i.e. removing an inner support ring from within a plurality of rolling members as a shaft is inserted therein). One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David P. Bryant whose telephone number is (571) 272-4526. The examiner can normally be reached on Monday-Thursday (6:30-5:00).

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David P. Bryant  
Primary Examiner  
Art Unit 3726

dpb  
9/12/05